

1644

1600

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/500,746DATE: 10/18/2001  
TIME: 09:45:14Input Set : A:\ES.txt  
Output Set: N:\CRF3\10182001\I500746.raw

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3 <110> APPLICANT: Winchester , Robert J.  
4 Gulko, Percio  
5 Seki, Tetsunori  
7 <120> TITLE OF INVENTION: USES OF INHIBITORS FOR THE ACTIVATION OF CXCR4 RECEPTOR BY  
SDF-1 IN  
8 TREATING RHEVMATOID ARTHRITIS  
10 <130> FILE REFERENCE: 0575/57005-B  
12 <140> CURRENT APPLICATION NUMBER: 09/500,746  
13 <141> CURRENT FILING DATE: 2000-02-09  
15 <160> NUMBER OF SEQ ID NOS: 23  
17 <170> SOFTWARE: PatentIn version 3.1  
19 <210> SEQ ID NO: 1  
20 <211> LENGTH: 13  
21 <212> TYPE: DNA  
22 <213> ORGANISM: Artificial Sequence  
24 <220> FEATURE:  
25 <223> OTHER INFORMATION: Primer  
27 <220> FEATURE:  
28 <221> NAME/KEY: misc\_feature  
29 <223> OTHER INFORMATION: primer  
32 <400> SEQUENCE: 1  
33 gatccgcggc cgc 13  
36 <210> SEQ ID NO: 2  
37 <211> LENGTH: 10  
38 <212> TYPE: DNA  
39 <213> ORGANISM: Artificial Sequence  
41 <220> FEATURE:  
42 <223> OTHER INFORMATION: Primer  
44 <220> FEATURE:  
45 <221> NAME/KEY: misc\_feature  
46 <223> OTHER INFORMATION: Primer  
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50 gcggccgcgt 10  
53 <210> SEQ ID NO: 3  
54 <211> LENGTH: 24  
55 <212> TYPE: DNA  
56 <213> ORGANISM: Artificial Sequence  
58 <220> FEATURE:  
59 <223> OTHER INFORMATION: Primer  
61 <220> FEATURE:  
62 <221> NAME/KEY: misc\_feature  
63 <223> OTHER INFORMATION: Primer  
66 <400> SEQUENCE: 3  
67 accgacgtcg actatccatg aacg 24  
70 <210> SEQ ID NO: 4  
71 <211> LENGTH: 12  
72 <212> TYPE: DNA  
73 <213> ORGANISM: Artificial Sequence

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75 <220> FEATURE:  
76 <223> OTHER INFORMATION: Primer  
78 <220> FEATURE:  
79 <221> NAME/KEY: misc\_feature  
80 <223> OTHER INFORMATION: Primer  
83 <400> SEQUENCE: 4  
84 gatccgttca tg 12  
87 <210> SEQ ID NO: 5  
88 <211> LENGTH: 24  
89 <212> TYPE: DNA  
90 <213> ORGANISM: Artificial Sequence  
92 <220> FEATURE:  
93 <223> OTHER INFORMATION: Primer  
95 <220> FEATURE:  
96 <221> NAME/KEY: misc\_feature  
97 <223> OTHER INFORMATION: Primer  
100 <400> SEQUENCE: 5 24  
101 aggcaactgt gctatccgag ggag  
104 <210> SEQ ID NO: 6  
105 <211> LENGTH: 12  
106 <212> TYPE: DNA  
107 <213> ORGANISM: Artificial Sequence  
109 <220> FEATURE:  
110 <223> OTHER INFORMATION: Primer  
112 <220> FEATURE:  
113 <221> NAME/KEY: misc\_feature  
114 <223> OTHER INFORMATION: Primer  
117 <400> SEQUENCE: 6 12  
118 gatcctccct cg  
121 <210> SEQ ID NO: 7  
122 <211> LENGTH: 24  
123 <212> TYPE: DNA  
124 <213> ORGANISM: Artificial Sequence  
126 <220> FEATURE:  
127 <223> OTHER INFORMATION: Primer  
129 <220> FEATURE:  
130 <221> NAME/KEY: misc\_feature  
131 <223> OTHER INFORMATION: Primer  
134 <400> SEQUENCE: 7 24  
135 agcactctcc agcctctcac cgag  
138 <210> SEQ ID NO: 8  
139 <211> LENGTH: 12  
140 <212> TYPE: DNA  
141 <213> ORGANISM: Artificial Sequence  
143 <220> FEATURE:  
144 <223> OTHER INFORMATION: Primer  
146 <220> FEATURE:  
147 <221> NAME/KEY: misc\_feature  
148 <223> OTHER INFORMATION: Primer

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151 <400> SEQUENCE: 8  
152 gatcctcggt ga  
155 <210> SEQ ID NO: 9  
156 <211> LENGTH: 507  
157 <212> TYPE: PRT  
158 <213> ORGANISM: mouse  
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161 <221> NAME/KEY: MISC\_FEATURE  
162 <222> LOCATION: (337)..(337)  
163 <223> OTHER INFORMATION: x= to any amino acid  
166 <220> FEATURE:  
167 <221> NAME/KEY: MISC\_FEATURE  
168 <222> LOCATION: (376)..(376)  
169 <223> OTHER INFORMATION: x= to any amino acid  
172 <400> SEQUENCE: 9  
174 Ser Ala Val Cys Val Tyr His Leu Ser Asp Ile Gln Thr Val Phe Asn  
175 1 5 10 15  
178 Gly Pro Phe Ala His Lys Glu Gly Pro Asn His Gln Leu Ile Ser Tyr  
179 20 25 30  
182 Gln Gly Arg Ile Pro Tyr Pro Arg Ser Ala Val Cys Val Tyr His Leu  
183 35 40 45  
186 Ser Asp Ile Gln Thr Val Phe Asn Gly Pro Phe Ala His Lys Glu Gly  
187 50 55 60  
190 Pro Asn His Gln Leu Ile Ser Tyr Gln Gly Arg Ile Pro Tyr Pro Arg  
191 65 70 75 80  
194 Ser Ala Val Cys Val Tyr Ser Met Ala Asp Ile Arg Met Val Phe Asn  
195 85 90 95  
198 Gly Pro Phe Ala His Lys Glu Gly Pro Asn Tyr Gln Trp Met Pro Phe  
199 100 105 110  
202 Ser Gly Lys Met Pro Tyr Pro Arg Ser Ala Val Cys Val Tyr Ser Met  
203 115 120 125  
206 Asn Asp Val Arg Arg Ala Phe Leu Gly Pro Phe Ala His Lys Glu Gly  
207 130 135 140  
210 Pro Met His Gln Trp Val Ser Tyr Gln Gly Arg Val Pro Tyr Pro Arg  
211 145 150 155 160  
214 Ser Ala Val Cys Met Tyr Ser Met Ser Asp Val Arg Arg Val Arg Arg  
215 165 170 175  
218 Val Phe Leu Gly Pro Tyr Ala His Arg Asp Gly Pro Asn Tyr Gln Trp  
219 180 185 190  
222 Val Pro Tyr Gln Gly Arg Val Pro Tyr Pro Arg Pro Gly Thr Cys Pro  
223 195 200 205  
226 Gly Gly Ala Phe Thr Pro Asn Met Arg Thr Thr Lys Asp Phe Pro Asp  
227 210 215 220  
230 Asp Val Val Thr Phe Ile Arg Asn His Pro Leu Met Tyr Asn Ser Ile  
231 225 230 235 240  
234 Ser Pro Ile Pro Gly Thr Cys Pro Gly Gly Ala Leu Thr Pro Asn Met  
235 245 250 255  
238 Arg Thr Thr Lys Glu Phe Pro Asp Asp Val Val Thr Phe Ile Arg Asn  
239 260 265 270

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242 His Pro Leu Met Tyr Asn Ser Ile Tyr Pro Ile Pro Gly Thr Cys Pro  
243 275 280 285  
246 Gly Gly Thr Phe Thr Pro Ser Met Lys Ser Thr Lys Asp Tyr Pro Asp  
247 290 295 300  
250 Glu Val Ile Asn Phe Met Arg Ser His Pro Leu Met Tyr Gln Ala Val  
251 305 310 315 320  
254 Tyr Pro Leu Pro Gly Met Cys Pro Ser Lys Thr Phe Gly Thr Phe Ser  
255 325 330 335  
W--> 258 Xaa Ser Thr Lys Asp Phe Pro Asp Asp Val Ile Phe Ala Arg Asn His  
259 340 345 350  
262 Pro Leu Met Tyr Asn Ser Val Leu Pro Thr Pro Gly Thr Cys Pro Ser  
263 355 360 365  
W--> 266 Lys Thr Phe Gly Gly Phe Asp Xaa Ser Thr Lys Asp Leu Pro Asp Asp  
267 370 375 380  
270 Val Ile Thr Phe Ala Arg Ser His Pro Ala Met Tyr Asn Pro Val Phe  
271 385 390 395 400  
274 Pro Met His Arg Arg Pro Leu Ile Val Arg Ile Gly Thr Asp Tyr Lys  
275 405 410 415  
278 Tyr Thr Lys Ile Ala Val Asp His Lys Arg Pro Leu Ile Val Arg Ile  
279 420 425 430  
282 Gly Thr Asp Tyr Lys Tyr Thr Lys Ile Ala Val Asp Gln Arg Arg Pro  
283 435 440 445  
286 Leu Val Val Arg Thr Gly Ala Pro Tyr Arg Leu Thr Thr Ile Ala Val  
287 450 455 460  
290 Asp Gly Gly Arg Pro Leu Phe Leu Gln Val Gly Ala Asn Tyr Thr Phe  
291 465 470 475 480  
294 Thr Gln Ile Ala Ala Asp Asn Asn Arg Pro Ile Val Ile Lys Thr Asp  
295 485 490 495  
298 Val Asn Tyr Gln Phe Thr Gln Ile Val Val Asp  
299 500 505  
302 <210> SEQ ID NO: 10  
303 <211> LENGTH: 396  
304 <212> TYPE: PRT  
305 <213> ORGANISM: Human  
307 <400> SEQUENCE: 10  
309 Ser Tyr Pro Ala Pro His Gly Pro Glu Asp Pro Ala Pro Gln Phe Ala  
310 1 5 10 15  
313 His Met Phe Glu Asn Glu Ile Ser His Arg Thr Gly Ser Trp Asn Phe  
314 20 25 30  
317 Ala Pro Asn Pro Asp Lys Gln Trp Leu Leu Gln Arg Thr Ser His Ala  
318 35 40 45  
321 Ala Pro His Gly Pro Glu Asp Ser Ala Pro Gln Phe Ser Glu Leu Tyr  
322 50 55 60  
325 Pro Asn Ala Ser Gln His Ile Thr Pro Ser Tyr Asn Tyr Ala Pro Asn  
326 65 70 75 80  
329 Met Asp Lys His Trp Ile Met Gln Tyr Thr Ala Thr Pro Ala Pro His  
330 85 90 95  
333 Ser Pro Trp Thr Ala Ala Pro Gln Tyr Gln Lys Ala Phe Gln Asn Val  
334 100 105 110

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337 Phe Ala Pro Arg Asn Lys Asn Phe Asn Ile His Gly Thr Asn Lys His  
 338 115 120 125  
 341 Trp Leu Ile Arg Gln Ala Lys Gly Lys Met Asn Asp Val His Ile Ser  
 342 130 135 140  
 345 Phe Thr Asp Leu Leu His Arg Arg Arg Leu Gln Thr Leu Gln Ser Val  
 346 145 150 155 160  
 349 Asp Glu Gly Ile Glu Arg Leu Phe Asn Leu Leu Arg Glu Leu Asn Gln  
 350 165 170 175  
 353 Leu Trp Asn Thr Gly Pro Met Leu Pro Ile His Met Glu Phe Thr Asn  
 354 180 185 190  
 357 Ile Leu Gln Arg Lys Arg Leu Gln Thr Leu Met Ser Val Asp Asp Ser  
 358 195 200 205  
 361 Val Glu Arg Leu Tyr Asn Met Leu Val Glu Thr Gly Glu Leu Glu Asn  
 362 210 215 220  
 365 Thr Thr Pro Met Thr Asn Ser Ser Ile Gln Phe Leu Asp Asn Ala Phe  
 366 225 230 235 240  
 369 Arg Lys Arg Trp Gln Thr Leu Leu Ser Val Asp Asp Leu Val Glu Lys  
 370 245 250 255  
 373 Leu Val Lys Arg Leu Glu Phe Thr Gly Glu Leu Asn Asn Thr Tyr Ala  
 374 260 265 270  
 377 Ile Tyr Thr Ser Asp His Gly Tyr His Leu Gly Gln Phe Gly Leu Leu  
 378 275 280 285  
 381 Lys Gly Lys Asn Met Pro Tyr Glu Phe Asp Ile Arg Val Pro Phe Phe  
 382 290 295 300  
 385 Met Arg Gly Pro Gly Ile Pro Arg Tyr Ile Ile Tyr Thr Ala Asp His  
 386 305 310 315 320  
 389 Gly Tyr His Ile Gly Gln Phe Gly Leu Val Lys Gly Lys Ser Met Pro  
 390 325 330 335  
 393 Tyr Asp Phe Asp Ile Arg Val Pro Phe Phe Ile Arg Gly Pro Ser Val  
 394 340 345 350  
 397 Glu Pro Tyr Ile Phe Tyr Thr Ser Asp Asn Gly Tyr His Thr Gly Gln  
 398 355 360 365  
 401 Phe Ser Leu Pro Ile Asp Lys Arg Gln Leu Tyr Glu Phe Asp Ile Lys  
 402 370 375 380  
 405 Val Pro Leu Leu Val Arg Gly Pro Gly Ile Lys Pro  
 406 385 390 395  
 409 <210> SEQ ID NO: 11  
 410 <211> LENGTH: 102  
 411 <212> TYPE: PRT  
 412 <213> ORGANISM: Human  
 414 <400> SEQUENCE: 11  
 416 Ser Ala Val Cys Val Tyr Tyr Ser Met Ala Asp Ile Arg Met Val Phe  
 417 1 5 10 15  
 420 Asn Gly Pro Phe Ala His Lys Glu Gly Pro Asn Tyr Gln Trp Met Pro  
 421 20 25 30  
 424 Phe Ser Gly Lys Met Pro Tyr Pro Arg Pro Gly Thr Cys Pro Gly Gly  
 425 35 40 45  
 428 Thr Phe Thr Pro Ser Met Lys Ser Thr Lys Asx Tyr Pro Asp Glu Val  
 429 50 55 60

  
 Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

**VERIFICATION SUMMARY**  
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L:258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:510 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:1240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23